# Mobility 2045 and High-Speed Rail

McKinney Urban Transit District Board Meeting September 12, 2018





- Mobility Planning Overview
- Financial Planning Overview
- Mobility 2045 Plan
- High-Speed Rail







# Mobility Planning Overview





### What is the Metropolitan Transportation Plan?

- Required by Law
- Referred to as The Mobility Plan



**Represents a Blueprint for the Region's Multimodal Transportation System** 



Covers at Least a 20-Year Timeframe



**Responds to Goals** 



Identifies Policies, Programs, and Projects for Continued Development



Guides the Expenditure of Federal and State Funds





### **Mobility 2045 – Focus On Connections**

- Regional Passenger Rail
- Non-Motorized Connections
- Tolled Managed Lane <u>System</u>
- Emerging Technologies
- Freight
- High-Speed Rail







### **Mobility Plan Development**

**Infrastructure Maintenance** 

Maintain & Operate Existing Facilities

Bridge Replacements

Svste

Vax

Management, Operations and Technology

- Improve Efficiency & Remove Trips from System
- Traffic Signals and Bicycle & Pedestrian Improvements &

#### Growth, Development, and Land Use Strategies

More Efficient Land Use & Transportation Balance





## **Mobility Plan Development**

Infrastructure Maintenance **Maintain & Operate Existing Facilities Bridge Replacements** System Management, Operations and Technology Maxim kisti Improve Efficiency & Remove Trips from System Traffic Signals and Bicycle & Pedestrian Improvements Growth, Development, and Land Use Strategies More Efficient Land Use & Transportation Balance **Rail and Bus** Induce Switch to Transit **HOV/Managed Lanes Increase Auto Occupancy Freeways/Tollways and Arterials** Additional Roadway Capacity



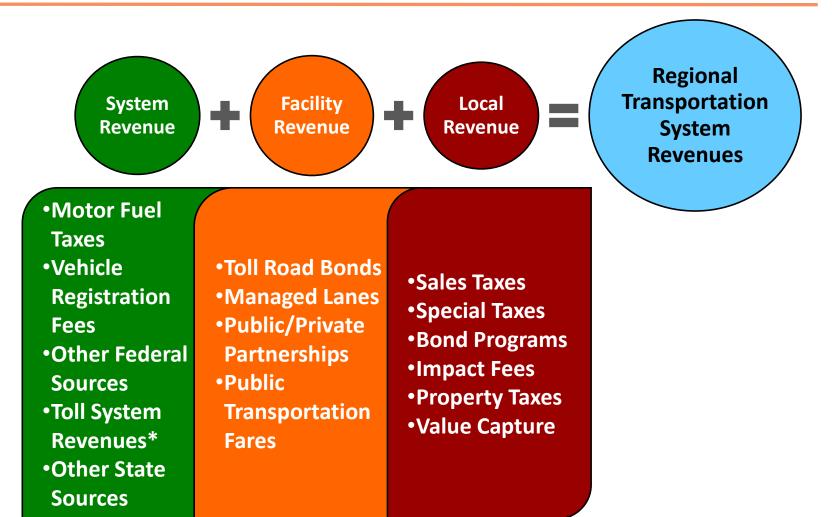


# **Financial Planning Overview**





### **Transportation Funding Basics**





\*Revenue from existing NTTA facilities after bonds are retired.



### **Financial Plan Requirements**

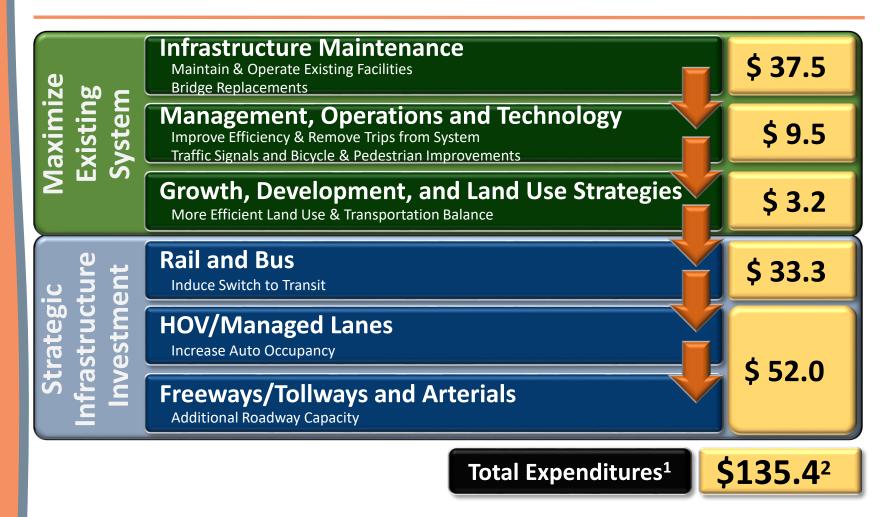
- Use all "Reasonably Expected" Sources
- Year of Expenditure Dollars
- Must be Financially Constrained

**Balance Priorities with Available Resources** 





## **Mobility 2045 Expenditures**



Notes:

1 2

<sup>1</sup>Actual dollars, in billions. Values may not sum due to independent rounding.

Balances to reasonably expected revenue, demonstrating financial constraint.



# Mobility 2045 Plan





## Mobility 2045 Goals

#### Mobility

- Improve Transportation Options
- Support Travel Efficiency Strategies
- Ensure Community Access to System and Process

### Quality of Life

- Enhance Environment and Life Styles
- Encourage Sustainable Development

#### System Sustainability

• Ensure Adequate Maintenance, Safety, and Reliability

Natura

Environment

Sustaina

Economic Vitality

• Pursue Long Term, Sustainable Financial Resources

#### Implementation

- Provide Timely Planning and Implementation
- Develop Cost Effective Projects and Programs



13

Infrastructure Maintenance Maintain & Operate Existing Facilities Bridge Replacements

\$ 37.5 B

- Regular Maintenance
- TxDOT Programmed
- Bridge Replacement Program



#### Management, Operations, and Technology Improve Efficiency & Remove Trips from System Traffic Signals and Bicycle & Pedestrian Improvements

\$9.5 B

- Traffic Signal Retiming Program
- Technology Program
- Bike/Ped Program
- Asset Optimization Program



#### Growth, Development, and Land Use Strategies More Efficient Land Use and Transportation Balance \$3.2 B

- Incentives for Mixed-Use Development
- Last Mile Connections
- Local Government Coordination





#### Rail and Bus Induce Switch to Transit



### Local Transit Agencies

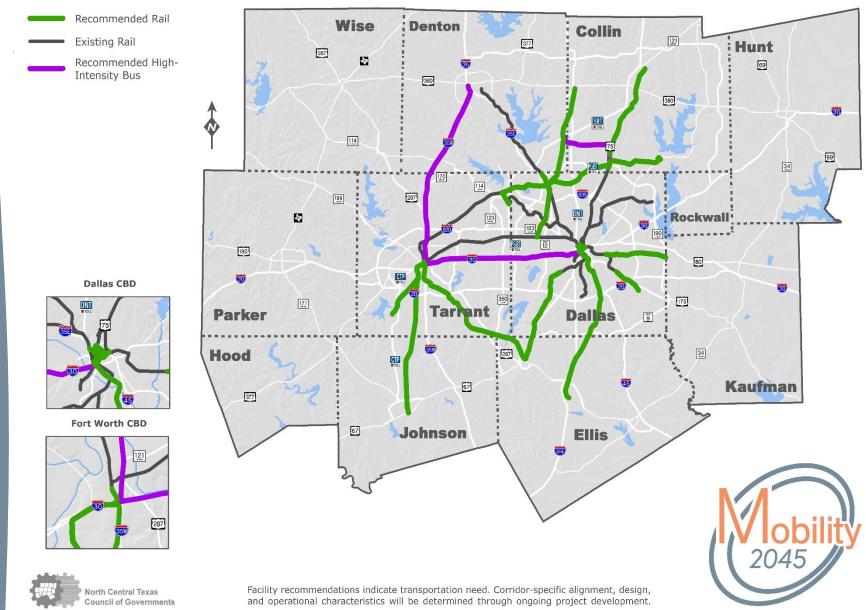
TEXP

- McKinney UTD
- Trinity Metro
- DART
- DCTA



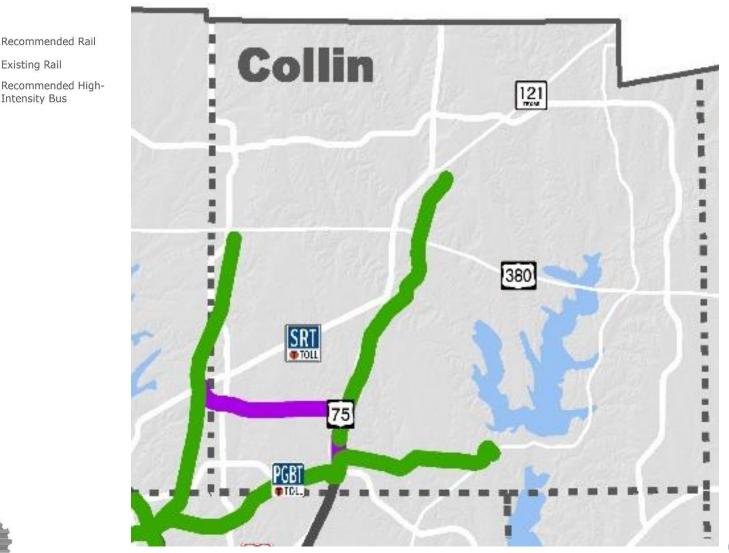


#### **Transit Corridor Recommendations**



18

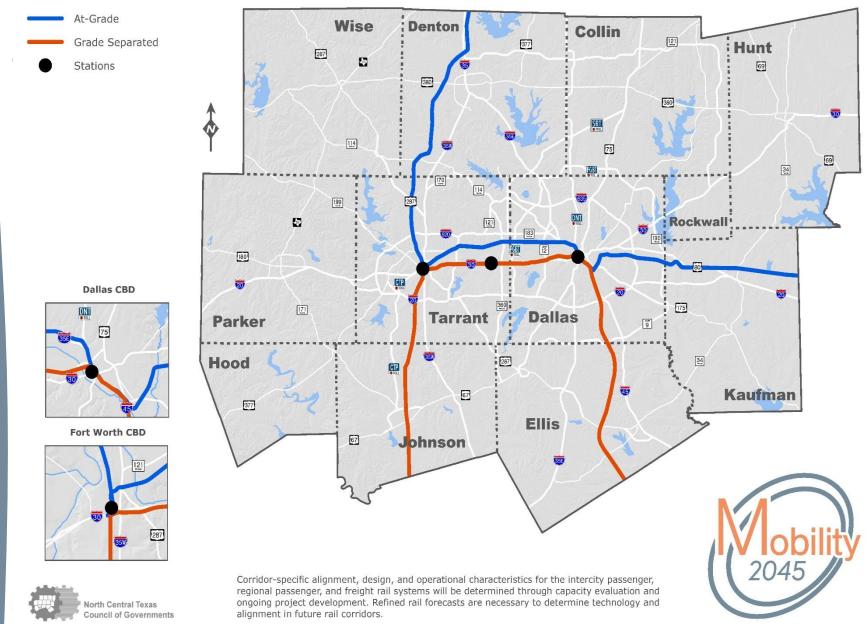
### **Collin County Transit Corridor Recommendations**







### **High-Speed Rail Recommendations**



June 2018

HOV/Managed Lanes Increase Auto Occupancy Corridor Traffic Management

\$ **52.0** B

Source: North Tarrant Express

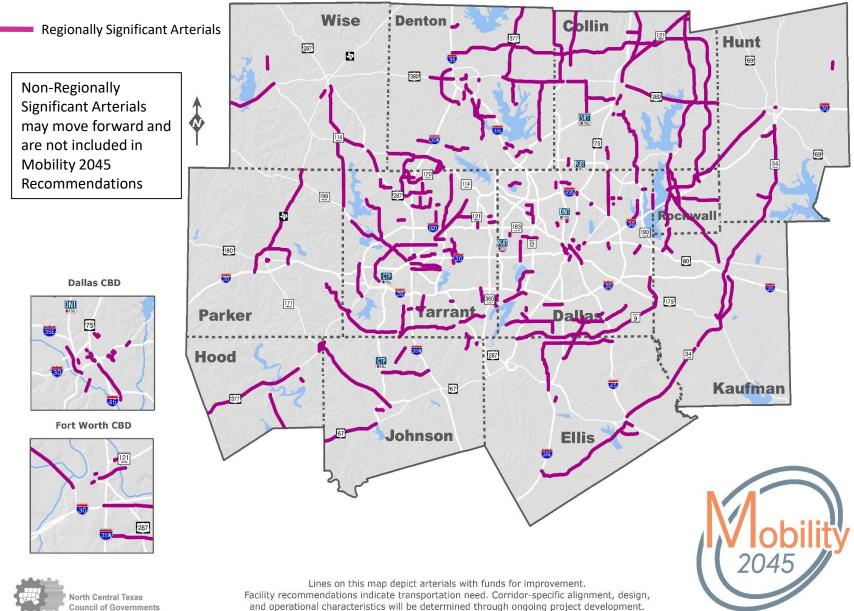
**Freeways/Tollways and Arterials** Additional Roadway Capacity

- Economic Development Engine
- Transportation System Backbone
- Increased Connectivity
- Strategic Investment
- Accessibility



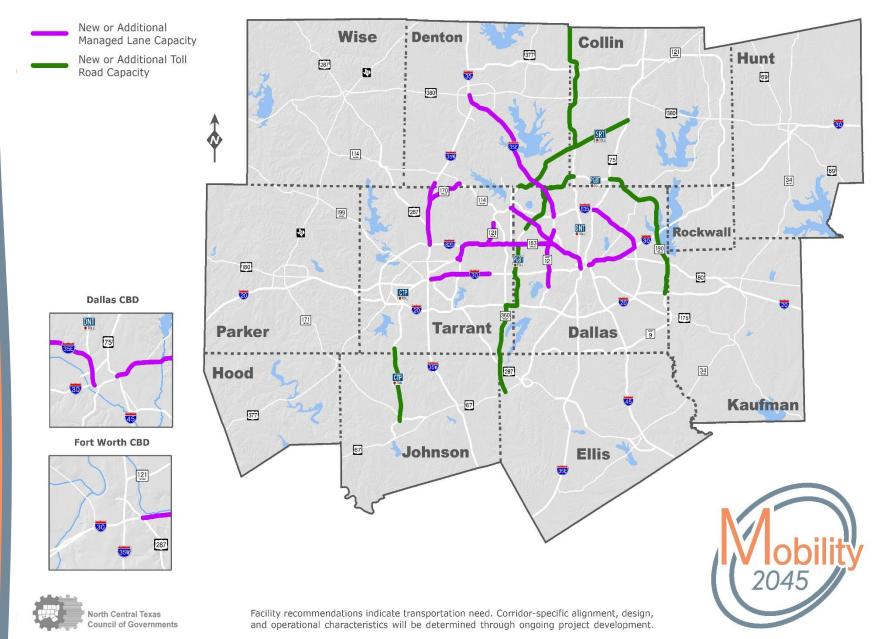


### **Regionally Significant Arterial Improvements**



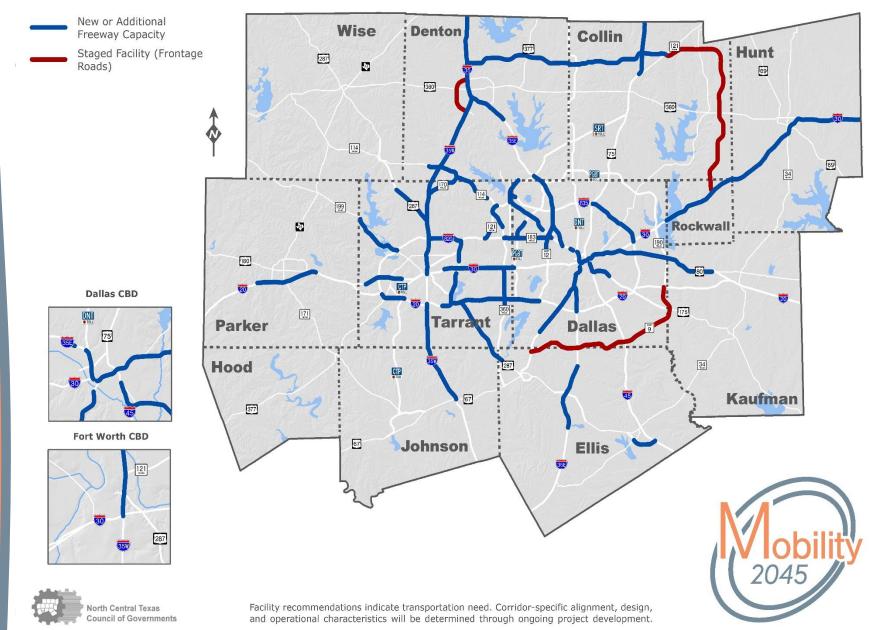
June 2018

### **Priced Facility Recommendations**



March 6, 2018

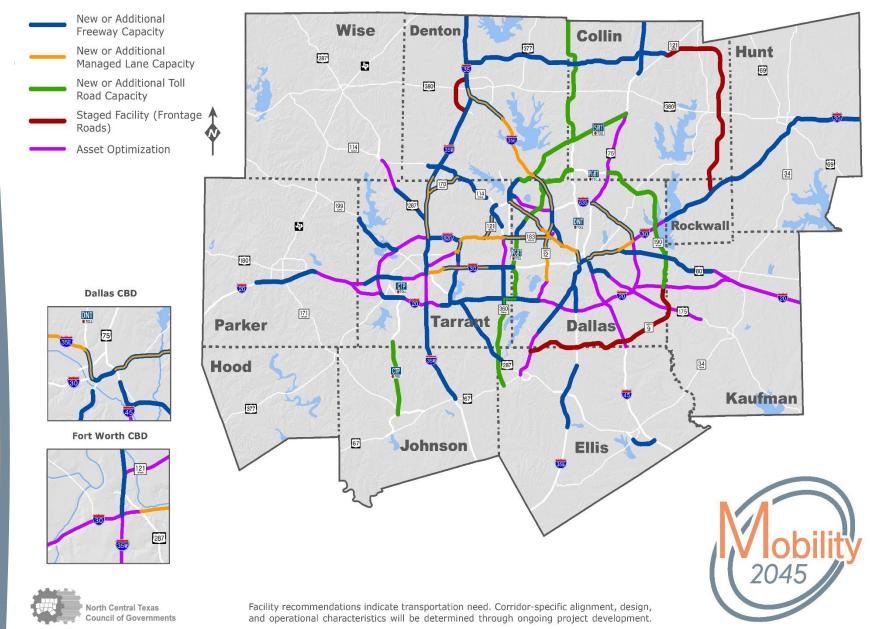
#### **Freeway Recommendations**



February 23, 2018

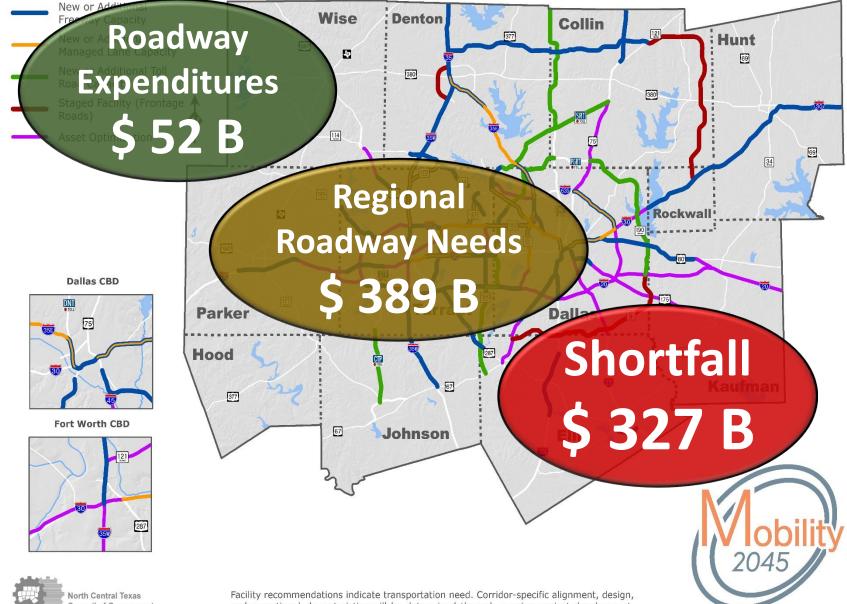
24

#### **Major Roadway Recommendations**



25

#### **Major Roadway Recommendations**

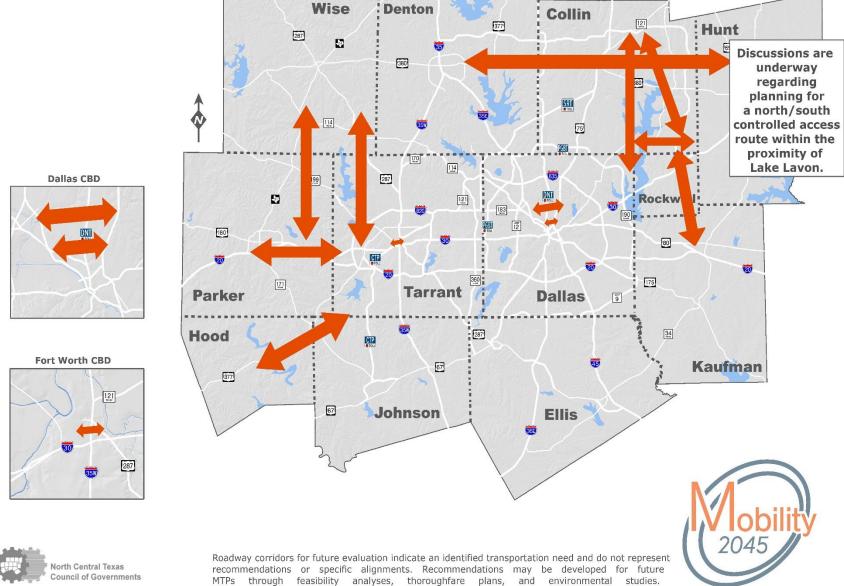


Council of Governments

June 2018

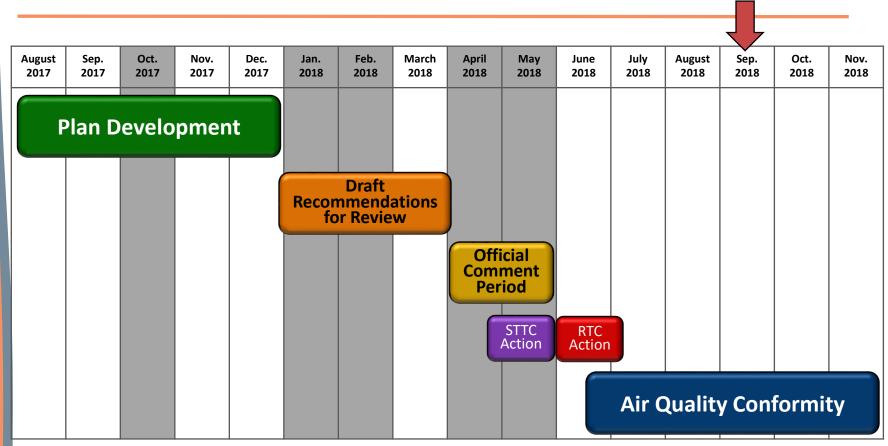
and operational characteristics will be determined through ongoing project development.

#### **Roadway Corridors for Future Evaluation**



27

## **Mobility 2045 Schedule**



#### Notes:

- Public meetings held during highlighted months.
- Regional Transportation Council action on Mobility 2045 Plan scheduled for June 14, 2018.





# **High-Speed Rail**





### **DFW High-Speed Rail**

- Connected System
- "One Seat Ride"
- Three Stations
  - Fort Worth
  - Arlington
  - Dallas



Source: Getty Images





## **Dallas to Houston Current Activity**

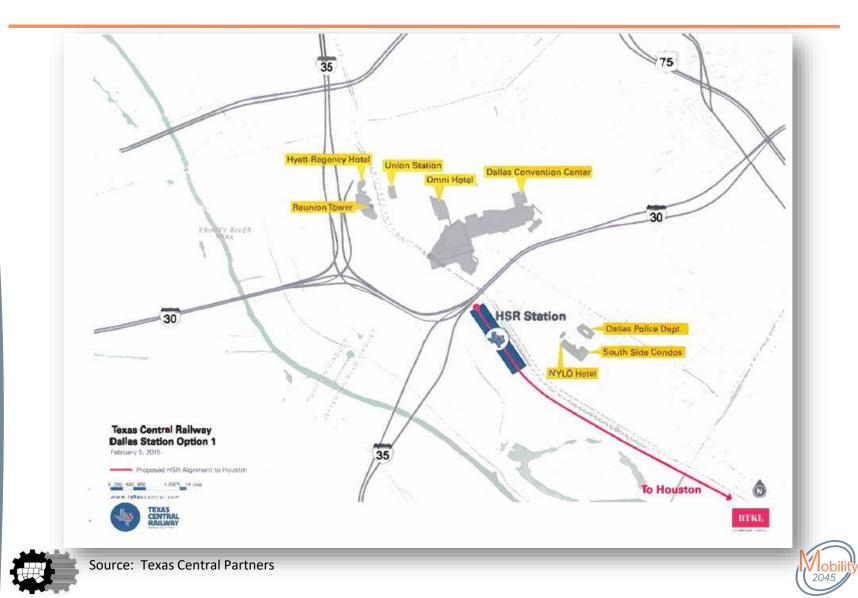
- Building the Bullet Train Every Day
- Working with Design/Build Partner
- Land Option Program
- Preparation for Construction Activity
- Released DEIS
  - Comments Received
  - Record of Decision Expected 4Q 2018



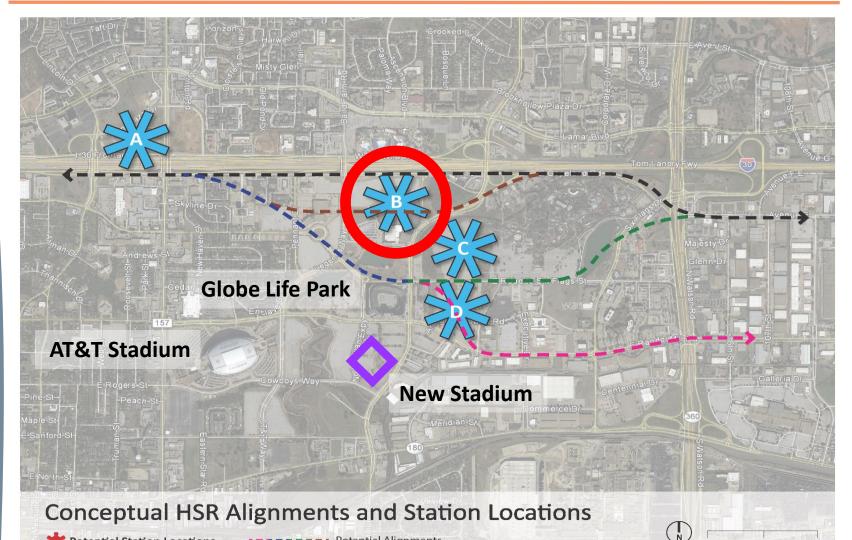




### **Downtown Dallas Station**



### **Potential Arlington Station and Alignment Options**



**\*** Potential Station Locations

Potential Alignments

1000

2000

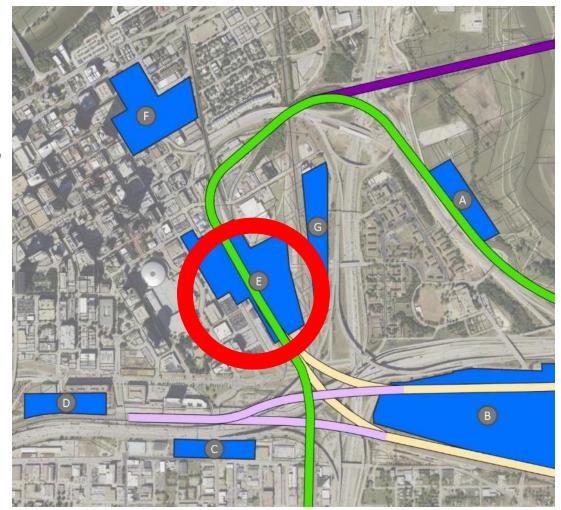
### **Fort Worth Station Location Results**

### E. ITC – 127

G. Central Rail – 121

F. East Sundance – 115

- C. Southside 96
- **A.** Butler **89**
- **D.** T&P **86**
- B. East Lancaster 81







## What is Hyperloop?

HYPERLOO!

Cargo pod

- New Mode of Transportation Consisting of Moving Passenger and Cargo Vehicles Through a Near-Vacuum Tube Using Electric Propulsion
- Autonomous Pod Levitates Above the Track and Glides at 700+ MPH Over Long Distances

PER



Passenger pod



### Hyperloop Test Track







### **Current NCTCOG Efforts**

- Completed Station Area Studies
- Coordinating with Other MPOs

Fort Worth to Laredo Corridor

**Preparing for Procurement** 

Preparing for EIS Procurement

**Fort Worth to Dallas** 

Assisting Local Governance Entity
Creation





### **Questions**?

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### www.nctcog.org/mobility2045



